



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,290	01/16/2002	Stefan Gabriel	00167-434001 / 02-31-0352	2333

7590

10/02/2003

JOEL R. PETROW  
Smith & Nephew  
1450 Brooks Road  
Memphis, TN 38116

EXAMINER

ROBERTS, PAUL A

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/046,290

Applicant(s)

GABRIEL ET AL.

Examiner

Paul A Roberts

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 19-21 and 23-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 19-20, 34, 35, 37 is/are allowed.
- 6) ☒ Claim(s) 21, 23, 24, 26-33, 36 and 38 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 21, 23, 24, 26-33, 36, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Foerster 2002/0128684.
2. Regarding claims 21, 23, 24, and 36, Foerster discloses a tissue anchor deployment tool having a member (556) defining a region (the weldment (from paragraph 105)) to receive a tissue anchor (548) (Foerster discloses 556 is welded to 548, thus the outside of 556 receives 548, 554 comprises element 548), the member includes an applicator 572, which is configured to move laterally to deploy the anchor from the region (the anchor is deployed from the region (and thus the member) when a sufficient pulling force is applied (from paragraph 108)), a movable element (550 & 558) coupled to the member (figure 12a shows that the tubes are coupled) for movement relative to the member between an extended position (shown in figure 12a ) and a retracted position (when element 550 is withdrawn) substantially uncovering the tissue anchor when in the retracted position, the movable element comprises a flexor (proximal end of 558) which is capable of deflecting the applicator upon axial movement of the movable element. The

Art Unit: 3731

flexor can be moved without moving the applicator, and the applicator includes a straight portion.

3. Regarding claim 26, Foerster discloses: a tissue anchor deployment tool, having a 1<sup>st</sup> member (556) and second member (550 and 558) coupled for relative motion, the tool including a flexor and an applicator, inserting a tissue anchor into a tissue using the insertion tool, the tissue anchor being mounted to the first member (by the welding tab 580) and substantially covered by the second member during insertion into the tissue, relatively moving the first and second members such that the flexor engages the applicator to deflect the applicator to deploy the tissue anchor from the first member (accomplished by adding the additional pulling force).
4. Regarding claim 27, the second member moves proximally to the first member.
5. Regarding claim 28, the step of moving uncovers the anchor (moving element 550 in relation to 556).
6. Regarding claims 29 and 30, the step of moving deploys the anchor by deflecting the applicator laterally to engage the tissue (moving element 558 with respect to 556). The tissue anchor will be rotated by said moving step.
7. Regarding claims 31, 33, and 38, Foerster disclose an arthroscopic method comprising: inserting a tissue anchor into tissue, engaging an applicator to deflect the applicator such that the applicator rotates the tissue anchor during deployment of the tissue anchor into tissue.
8. Regarding claim 32, the tissue anchor is substantially covered by element 550.

***Allowable Subject Matter***

Claims 1-20, 35, and 37 are allowed. The Foerster reference nearly reads on the claims 1, 19, and 20. This is the examiner's interpretation: element 556 = 1<sup>st</sup> member, elements 550 and 558 = the 2<sup>nd</sup> member, element 548 = anchor, elements 576 and 572 = the applicator, proximal tip of 558 is the flexor. The first member receives the anchor. Foerster discloses the deployment tube is welded directly element 554. Element 554 comprises the anchor. Element 550 of the 2<sup>nd</sup> member covers the tissue anchor. The applicator **does not** engage the tissue anchor. The flexor engages the applicator to deflect the applicator to deploy the anchor. Also, Trott US 5,472,452 discloses a device that reads on all of the applicant's parts' structure and location. However, that device is the anchor itself, not a tool for inserting the anchor. Thus Trott nor Foerster anticipate claims 1, 19, or 20.

Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Foerster does not disclose a ramp portion in combination with the claims on which claim 25 depends.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are relevant to the general concept of the invention:

US 6146408 A	Bartlett, Edwin C.	Apparatus and method for anchoring sutures
US 5957953 A	DiPoto, Gene P. et al.	Expandable suture anchor

US 20010014800 A1 Frazier, Andrew G.C. et al. Method of reducing the volume of the heart

US 20020151891 A1 Glenn, Melvin L. III et al. Bone-anchor loading devices and methods of use therefor

US 5931840 A Goble, E. Marlowe et al. Bone fixator for a ligament anchor system

US 5584835 A Greenfield, Jon B. Soft tissue to bone fixation device and method

US 20030167072 A1 Oberlander, Michael A. Multi-anchor suture

US 20020087188 A1 Pedlick, Jack S. et al. Wedge shaped suture anchor and method of implantation

US 6041485 A Pedlick, Jack S. et al. System and method for anchoring a cord-like element to a workpiece

US 6183479 B1 Tormala , Pertti et al. Installation tool for suture anchor

US 6540770 B1 Tornier, Alain et al. Reversible fixation device for securing an implant in bone

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


Art Unit: 3731


the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A Roberts whose telephone number is (703) 305-7558. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Paul Roberts  
Paul.Roberts@uspto.gov   
25/09/03

  
MICHAEL J. MILANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700